

# Our future cities can fuel our prosperity and improve our in quality of life



## <u>Challenges</u>

Climate variability and change Population growth & urbanisation Economic and institutional constraints

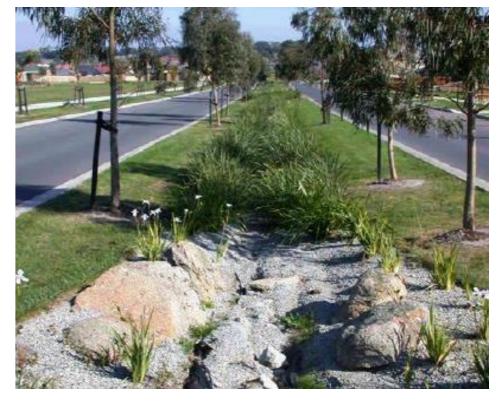






## FUTURE







## <u>Challenges</u>

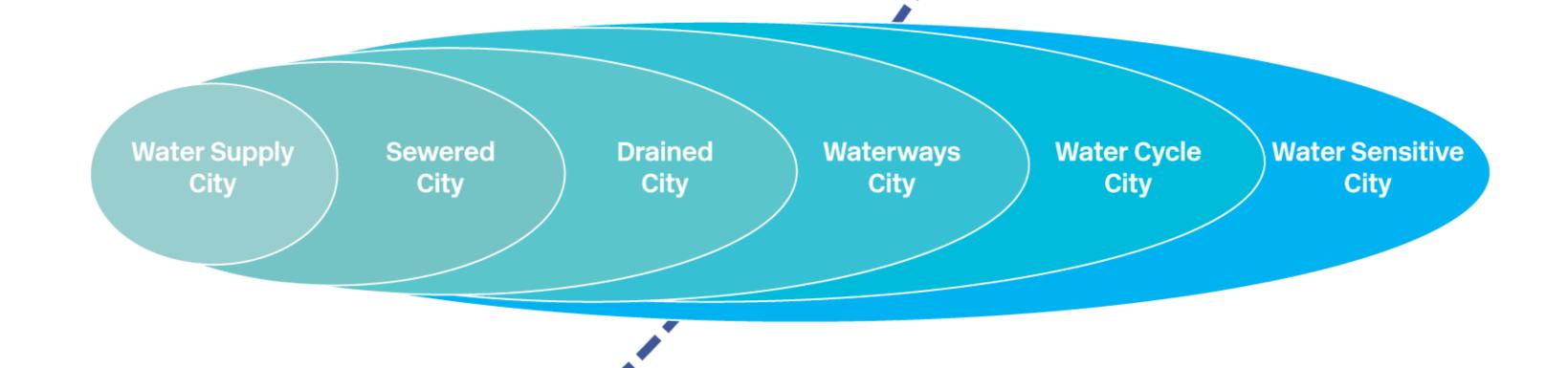
Climate variability and change Population growth & urbanisation Economic and institutional constraints



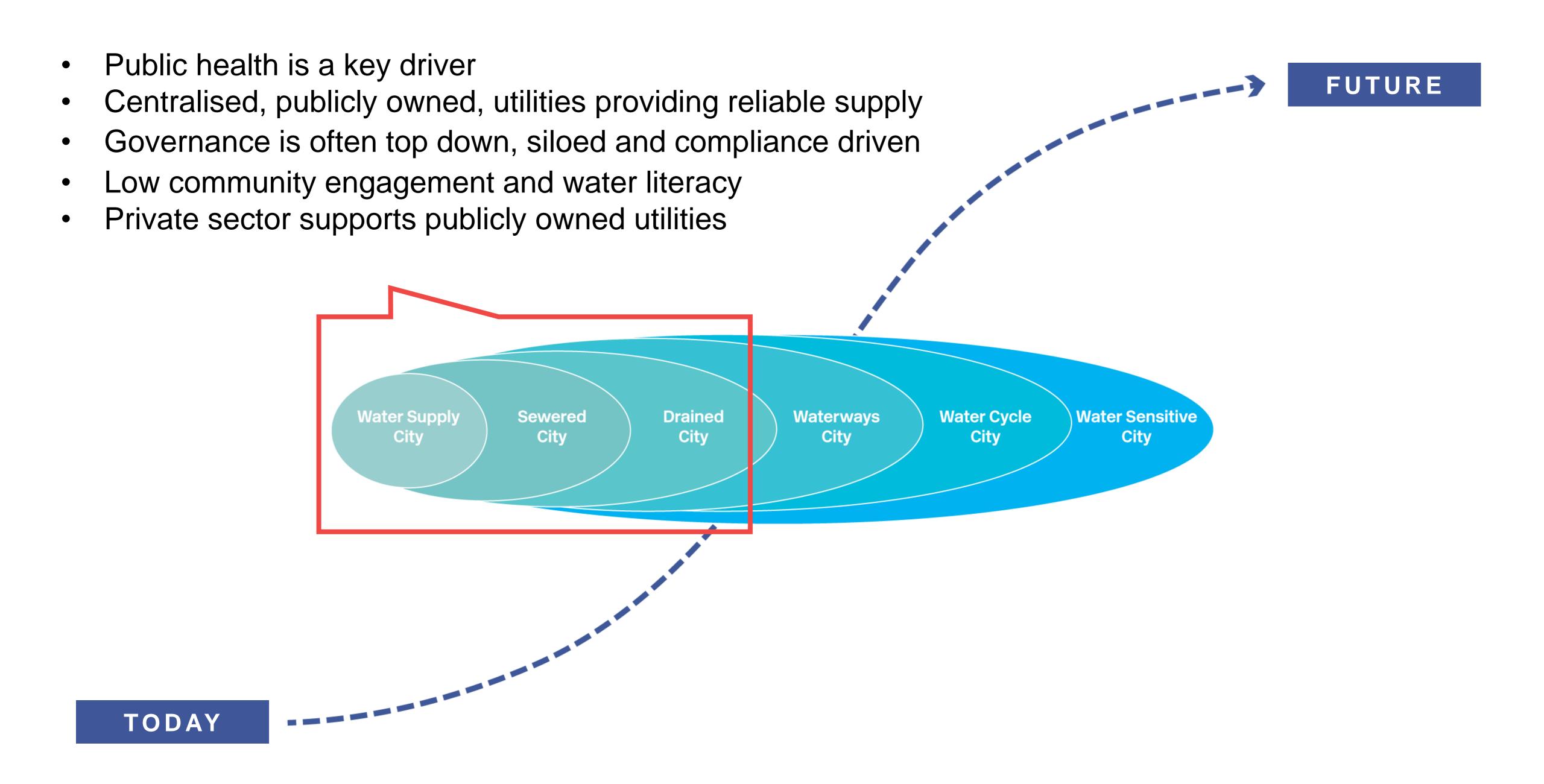
## Research shows that cities transition through a number of stages

FUTURE

Water utilities play a critical role in the transition process









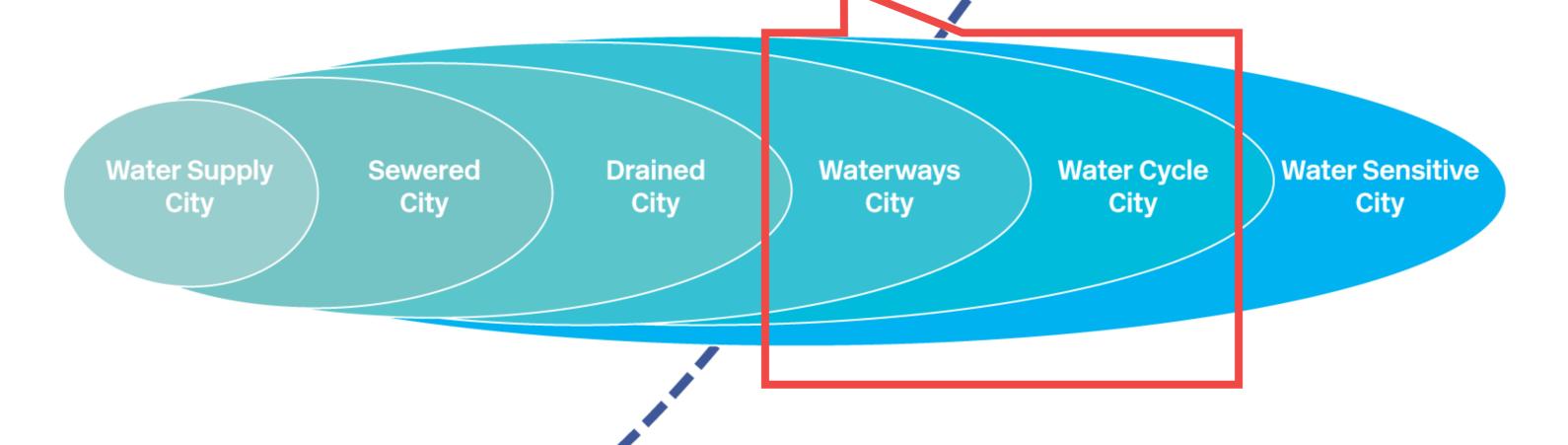
 Focus expanded to include waterway health, sustainability, resilience and liveability

The water cycle is planned as an integrated system

 Stronger focus on diversity of centralised and decentralised supply sources

Governance is more risk based and outcome focused

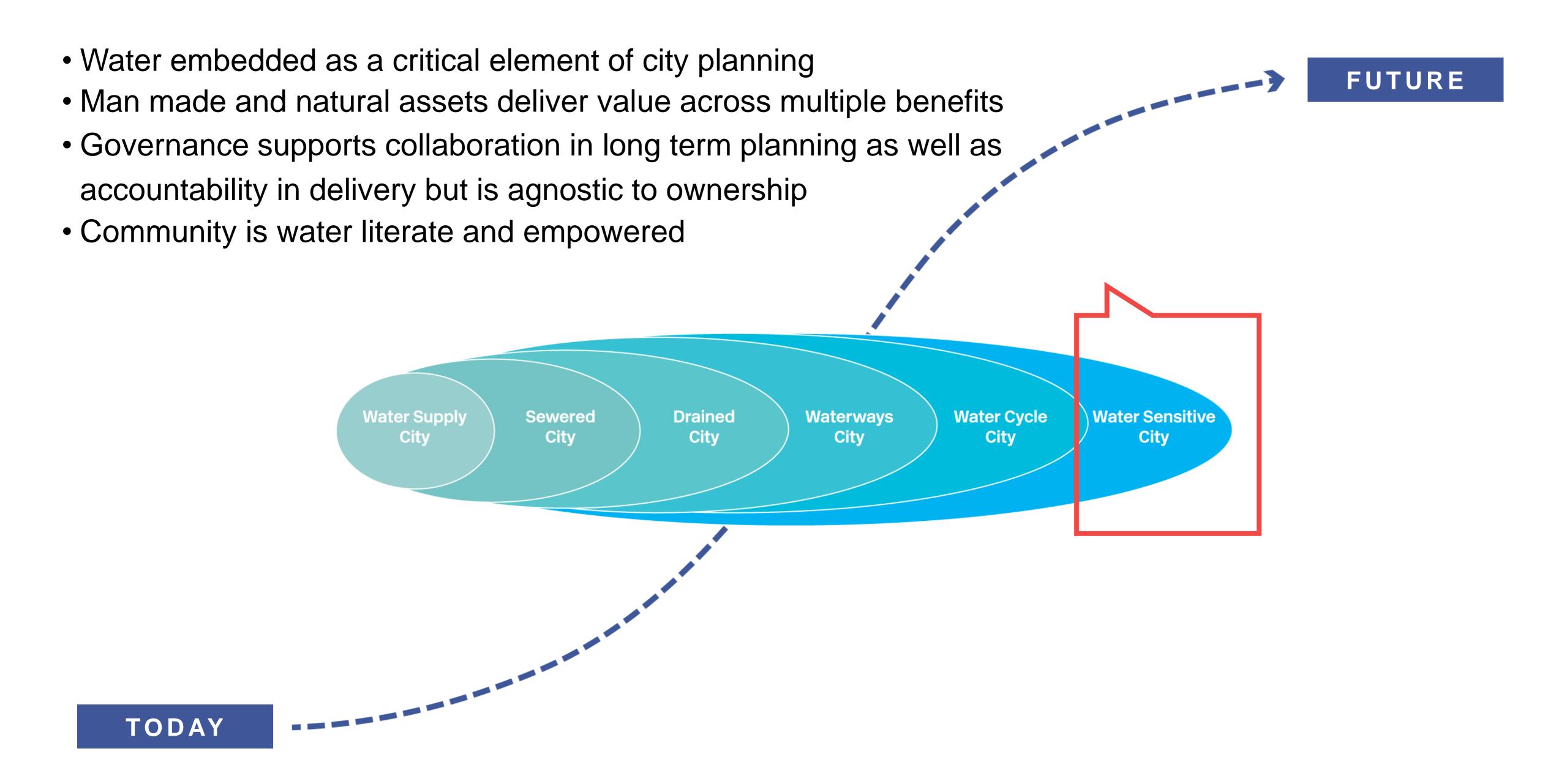
Increased partnerships with private and community sectors



TODAY



**FUTURE** 





In addition to identifying <u>what</u> each phase of the transition looks like, CRCWSC research has also identified <u>how</u> utilities can make the transition



EMBEDDING NEW PRACTICE

POLICY AND PRACTICE DIFFUSION

KNOWLEDGE DISSEMINATION

SHARED UNDERSTANDING & ISSUE AGREEMENT

ISSUE DEFINITION

ISSUE EMERGENCE



CRCWSC Research shows there is a lot utilities can do internally, externally in partnership with others and to influence their authorising environment

FUTURE

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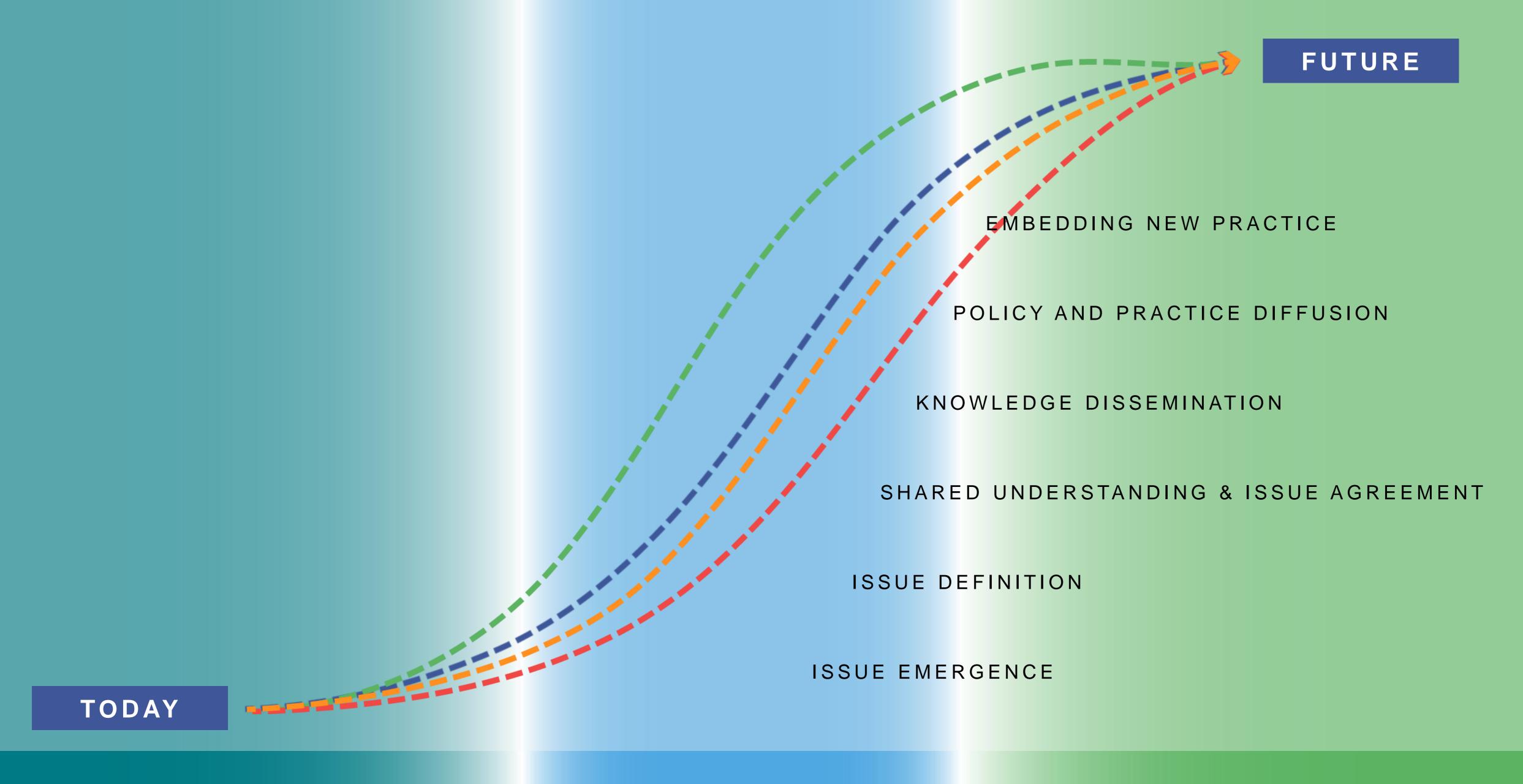
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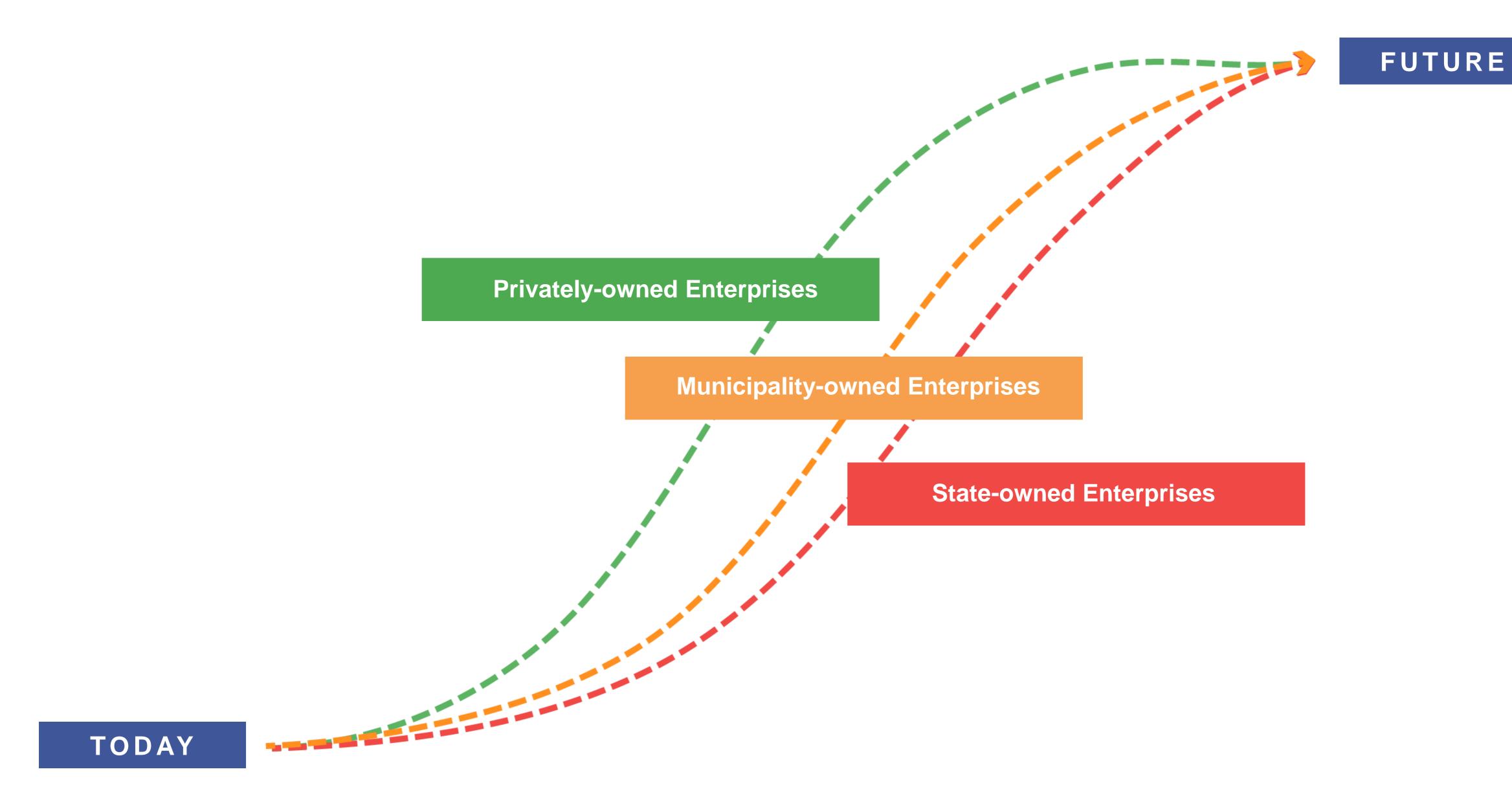
**Internal Initiatives** 

**External Initiatives** 



**Internal Initiatives** 

**External Initiatives** 





## For example – State Owned Enterprise **FUTURE Urban Water Policy Reform** Water for Victoria **Working with community Building industry capacity** Involving community in setting prices and service levels to effect change Mobilising community action during extreme events Stormwater quality and Increasing access to assets to increase community value flood management Efficiency and innovation in core services Improving the efficiency of existing networks **State-owned Enterprises** Digital innovation Diversifying and integrating water sources Establishing a culture of innovation and collaboration **New business models** Green waste to energy Partnering for innovative servicing solutions **EXISTING** "Activism". Demonstration, Proof-of concept and advocacy for policy reform WATER Water sensitive urban design

**Internal Initiatives** 

UTILITIES

**External Initiatives** 

Precinct-scale stormwater harvesting

Case study – Water Sensitive Urban Design in Melbourne: Activism, Investment, Influence

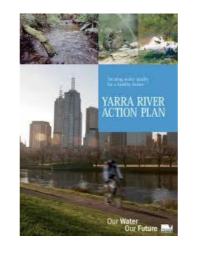


~2005 New tools and guidence

to operationalise change

**FUTURE** 

2017 State Water Plan



2006 \$600M state govt investment in Yarra River



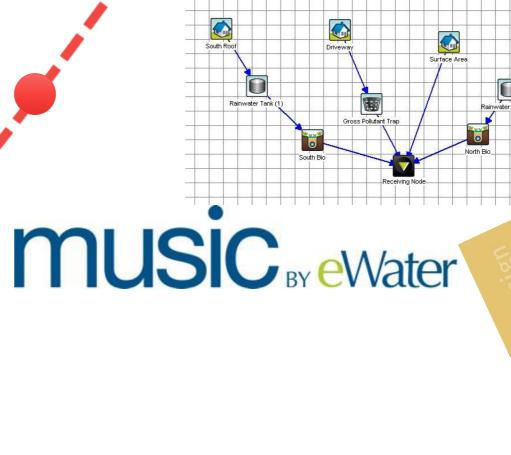
**2002** Building industry capacity



~2000 Lynbrook Estate demonstration of new practice



1996 Bay study provides scientific consensus on the problem



**EXISTING** WATER UTILITIES **1980s** Issue emergence

GIVE THE YARRA A GO!





Case study – Water Sensitive Urban Design in Melbourne: Activism, Investment, Influence



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FUTURE

2017 State Water Plan



**External Initiatives** 

New authorising environment



## **Internal Initiatives**

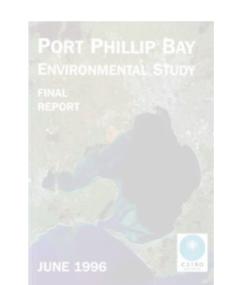
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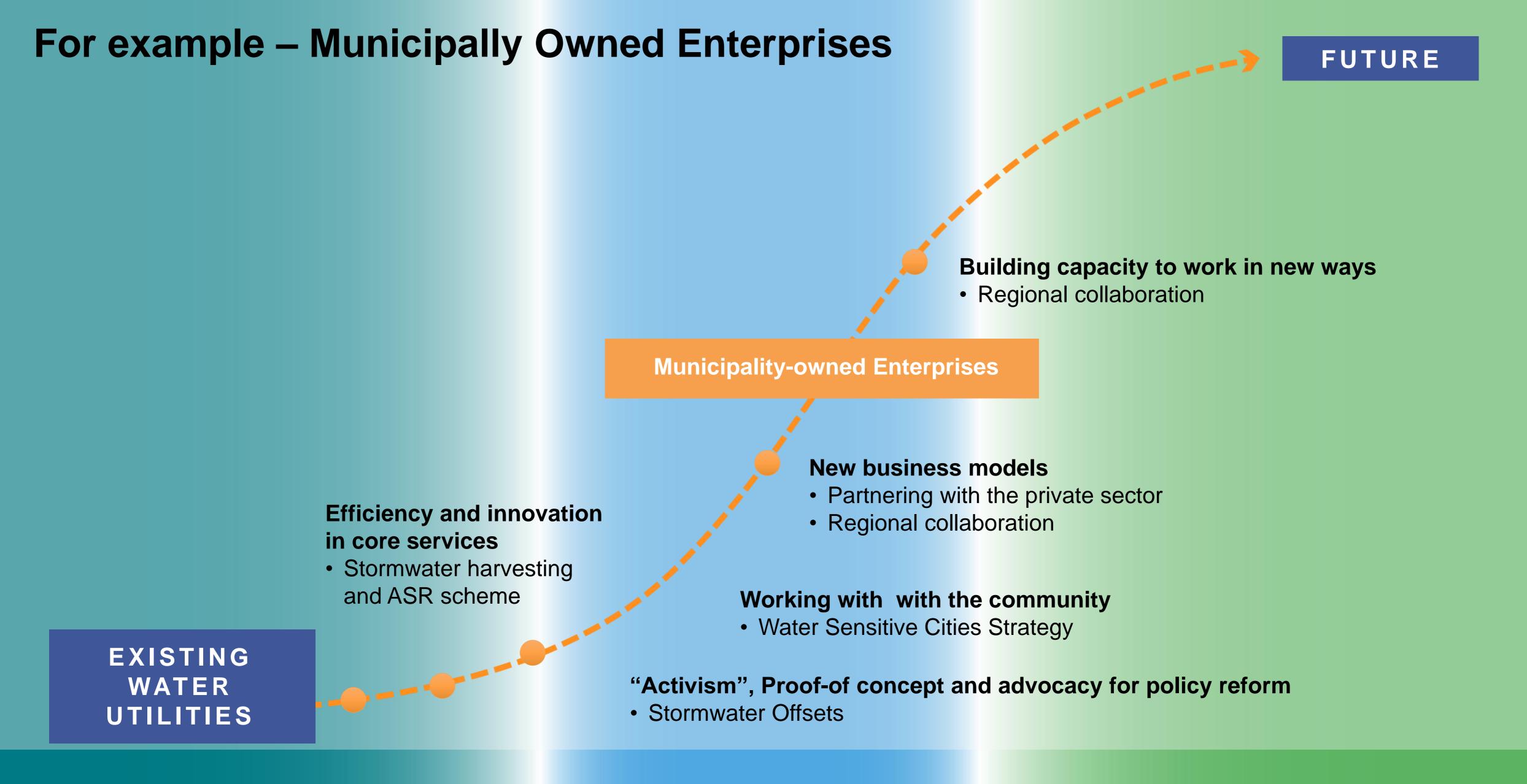
WATER

**1980s** Issue emergence

1996 Bay study provides scientific consensus on the problem







**Internal Initiatives** 

**External Initiatives** 

## For example – Private Sector Enterprises

FUTURE

#### **Changing regulation**

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-Water Industry Competition Act (NSW)

## **Changing financing models**

Asset recycling and value capture

#### **Privately-owned Enterprises**

"Activism",
Proof-of concept
and advocacy for
policy reform
-WSAA, IPA paper
on good regulation

#### **New business models**

Water-energy nexus, "bundling" services

#### Efficiency and innovation in core services

Integrated water services

EXISTING
WATER
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**Internal Initiatives** 

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### FUTURE

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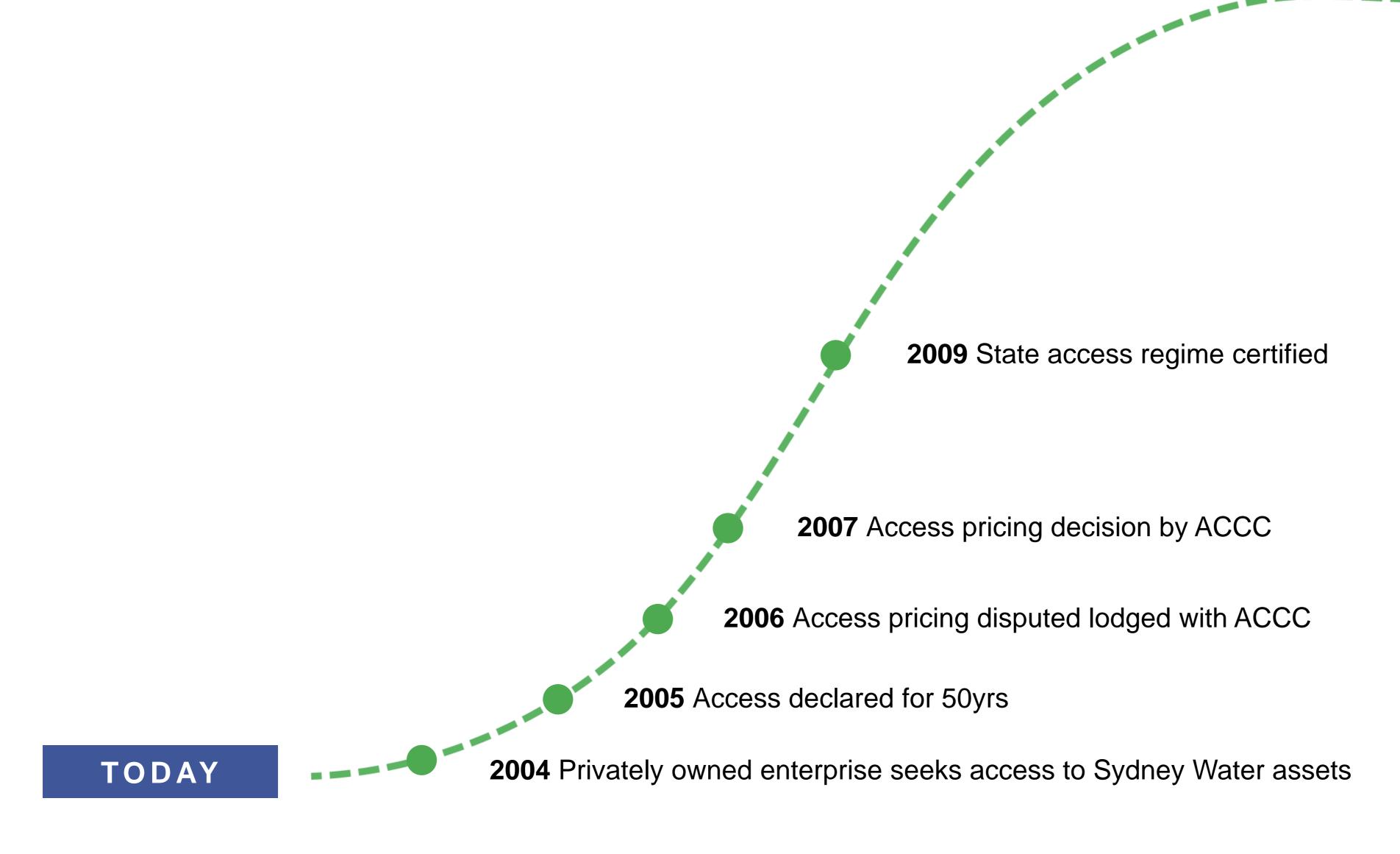
EXISTING WATER UTILITIES

**Internal Initiatives** 

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## For example – WICA (2006): Disruption leading to innovation



2013 Retail licence granted to Central Park (Flow Systems) for bundled services

2014 Water Industry Competition Act Reviewed

**2009** first WICA network operation and retail licences granted for non potable supply

2008 WIC Regulations introduced

2007 Access pricing decision by ACCC

**2009** State access regime certified Access undertaking

2006 Water Industry Competition Act

2006 Access pricing disputed lodged with ACCC

2005 Water & Wastewater Report IPART

**2005** Access appealed to ACT and declared for 50yrs



2004 Privately owned enterprise seeks access to Sydney Water assets



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TODAY

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## In summary

- The need for action is clear
- There is a lot water utilities can do now to start the transition
- While the transition pathways vary, and action is required on multiple fronts there are many examples of water utilities providing a leadership role by:
  - Transforming their businesses
  - Building new partnership with others
  - Supporting change in their broader policy and regulatory environment



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## Thank you.

